

39. STUDIES ON STIGONEMATACEAE

(With two text-figures)

Fritsch & Rich (1937-38) figured and described an alga under the name *Haplosiphon fontinalis* (Ag.) Born. having branches with long cells and without cross walls. As pointed out by H. Welsch (1962) this feature is unrepresented in *Haplosiphon fontinalis* of Frémy in Geitler (1932). A form of *Haplosiphon fontinalis* was also reported by Rich (1936) which also differs considerably from the one reported by Geitler. Further, the shortening of cells towards the ends of branches—a characteristic and notable feature of Frémy's drawing in Geitler (1932) and Desikachary (1959) was not indicated by Rich. Welsch (1962) therefore considered Rich's alga as another species of *Haplosiphon*. I agree with the view of Welsch that Frémy's alga where the shortening of cells towards the branch ends is prominently shown is the real *Haplosiphon fontinalis*. Considering these facts the present alga does not agree either with *H. fontinalis* nor with any other known species of the genus and hence it is described as a new species.

***Haplosiphon agarkarai* sp. nov. (Fig. 1)**

Thallus terrestrial, greenish black when old, greenish yellow when young, caespitose, filaments more or less entangled; primary prostrate filaments 8.5-13.5 μ broad containing cells in two rows, slightly longer than broad; filaments fairly branched, branching tree; branches arise from the prostrate filaments; more or less irregularly curved, slightly narrower than the main filaments 6.0-7.5 μ broad; heterocysts intercalary, cylindrical, common in the main filaments also, 7.5 μ broad 8.5 μ long; spores not seen.

Partially shaded marshy places in the hospital campus, Jagdalpur.

***Haplosiphon agarkarai* sp. nov.**

Thallus terrestris vestutus, glaucus, novellus viridis, lutens, caespites, fibrae plus minusque implicatae libere, fibrae primariae jacentes 8.5-13.5 μ latae, cum cellibus latibus in duobus seriebus. Fibrae bene ramificatae, ramusque veri, qui emergunt de fibribus prostratis plus minusque inflectae, incompositae, leve angustae quam fibrae principales, 6.0-7.5 μ latae, vagina-tenuis, pigmenta subflava ad hyalam. Cellae ramorum prope rotundae 6.8 μ latae. Heterocystes intercalares, cylindrici, communes in fibribus principalibus, etiam 7.5 μ lati, 8.5 μ longi, semina non videbantur.

In locis palustris umbrosisque campi neoscomii, Jagdalpur.

Haplosiphon attenuata sp. nov. (Fig. 2)

Plants look like small greenish yellow gelatinous almost spherical mass. Thallus consists of irregularly interwoven prostrate filaments of 2.5μ broad; cells in one row, longer than broad, 2.0μ broad, sheath thick hyaline; branching lateral, short true, sparse almost regular, nearly as broad as the main filaments containing 3-5 cells of equal size, roughly spherical, apical cell sharply attenuated and cone-like—a feature that distinguishes it from all other known members of the genus. Sheath of the branches indistinct, thin, colourless; heterocysts cylindrical, $2.0-3.0\mu$ broad, 2.6μ long, intercalary; spores not observed.

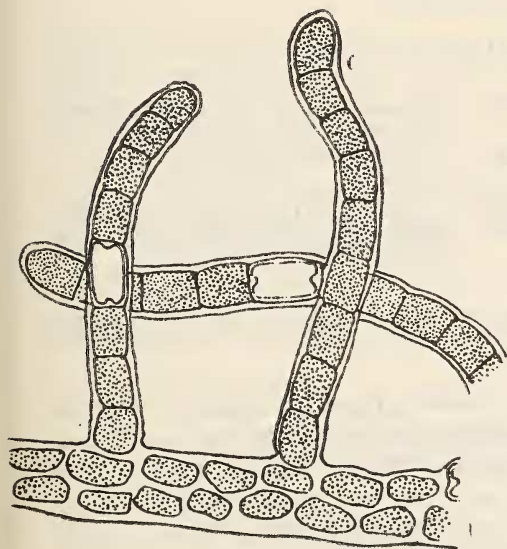


Fig. 1

25μ

Haplosiphon agarkarai

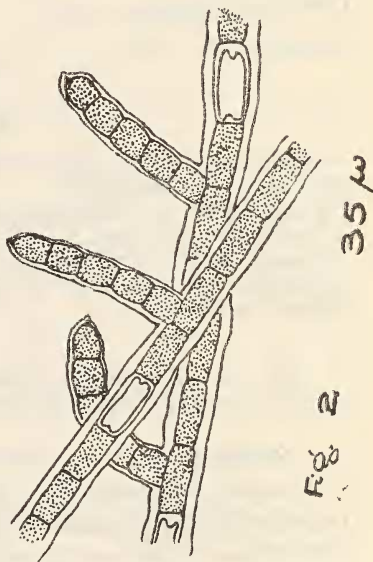


Fig. 2

35μ

Haplosiphon attenuata

On tree trunks in the forest office, Jagdalpur.

Haplosiphon attenuata sp. nov.

Fungi videntur tamquam molles virides subflair. Thallus cum fibribus jacentibus incompositae contextae, 2.5μ latae, cellae in seriebus singularibus, latiorae quam latae, vagina, hyala, crassa, rames laterales, veri breves, sparsi fere ordinati. Prope lati quam fibras principes, cum 3-5 cellis similis mensuribus, rauce globoidis, cella apעים attenuata acuta

sicut conum-proprietas particularia qui separat hane speciem ab omnibus speciebus genus, vagina ramorum indistincta, tenuis sine colore. Heterocystes cylindrici, 2.3 μ lati, 2.6 μ longi, intercalares, semina non inveniuntur.

Super stripibus arborum, in domus silvarum, Jagdalpur.

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B-109, H. A. COLONY,
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A. SUBRAMANIAM

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40. A PARASITE (*VISCUM ORIENTALE*) ON ANOTHER (*DENDROPHTHOE FALCATA*)

Normally the host range of parasitic flowering plants is restricted to non-parasitic plants but an interesting case of double parasitism was recorded during botanical collections in Bastar, Madhya Pradesh. *Viscum orientale* Willd. was found growing on *Dendrophthoe falcata* (Linn. f.) Etting which itself was parasitic on *Cleistanthus collinus* (Roxb.) Benth. ex HK. f. and *Anogeissus acuminata* (Roxb.) Wall. ex Bedd.

Herbarium specimens (Saxena 1627, 1628, Budra, Bastar, 28.iv.65) have been deposited in the Herbarium, State Forest Research Institute, Jabalpur, M.P.

NATIONAL BOTANIC GARDENS,
LUCKNOW,
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